

REMARKS

After entry of the foregoing amendment, claims 14-19, 21, 23, and 30-49 are pending. No claims have been cancelled. Claims 14, 23, 30, 35, and 38 have been amended. Support for these amendments may be found in the specification as originally filed at least as indicated below. Claims 45-49 have been added. Support for claims 45 and 47-49 may be found at least in claim 14. Support for claim 46 may be found in the specification as originally filed at least at page 55. No new matter has been added.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 14-19, 21, 23, and 30-44 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for various reasons.

First, the claims were rejected for some of the recited "optional substituents." The Examiner alleges that some recited substituents, specifically, "ether, acetals, the acids, amides and esters," are not radicals but classes of compounds which cannot reasonably be considered substituents. Office action at page 2. Applicants have amended claims 14, 30, 35, and 38 to incorporate formulas for various substituents, as included in the definitions of the substituents on pages 13-22 of the specification as originally filed. Claim 30 has been additionally amended to correct a spelling error. Applicants submit that the amendments presented herein render the rejection moot and respectfully request withdrawal of the rejection.

Second, the Examiner has maintained that the groups " C_{3-20} heterocyclyl and C_{5-20} aryl" are indefinite because it is not known how many heteroatoms are present, what kinds of heteroatoms are involved, what size ring is intended and how many rings are present." Office action dated March, 13, 2009, page 2. Again, Applicants direct the Examiner's attention to page 10, line 3 to page 11, line 8 and page 11, line 10 to page 12, line 36 of the specification, where these terms are defined. Applicants again submit that it is entirely proper for Applicants to define these terms in the specification. "An applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s)." MPEP 2111.01. Specifically, with respect to "which or how many heteroatoms are present," (Office action at page 2), the specification recites that "from 1 to 10 are ring heteroatoms" (page 10, lines 6-7). One of skill in the art would recognize and understand which atoms are heteroatoms. Examples of heterocyclyl groups and heteroaryl

groups are listed on page 10, line 16 to page 11, line 1 and page 12, lines 1-12, further indicating that heteroatoms include N, S, and O. Applicants have also amended claims 14, 30, 35, and 38 to indicate that the heteroatoms are selected from the group consisting of N, S, and O. With respect to how many rings are present, the specification states that there are “3 to 20 ring atoms” (page 10, line 6) and that “preferably, each ring has from 3 to 7 ring atoms” (page 10, line 7). One of skill in the art would immediately envisage the meaning of the terms and the scope of the claims. With respect to what kind of ring is intended, one of skill in the art would recognize and understand that saturated, unsaturated, monocyclic, and multicyclic rings are encompassed, and the examples listed on page 10, line 16 to page 11, line 1 and page 12, lines 1-12 and page 12, lines 14-36 further exemplify this. The Examiner also alleges that the term “aryl,” which encompasses “heteroaryl,” is indefinite because “a well-known definition cannot be altered.” Office action at page 2. Applicants submit that it is well known in the art that “aryl” includes “carboaryl” and “heteroaryl,” as is described in the specification at page 11, lines 21 and 35. The ubiquitous organic chemistry textbook by L.G. Wade (*Organic Chemistry*; Prentice Hall: New Jersey, 1995) states on page 738 that “an aryl group, abbreviated Ar, is the aromatic group that remains after the removal of a hydrogen atom from an aromatic ring.” Further, the textbook defines on page 720 that “aromatic compounds are those that meet the following criteria: (1) the structure must be cyclic, containing some number of conjugated pi bonds; (2) each atom in the ring must have an unhybridized p orbital (the ring atoms are usually sp^2 hybridized, or occasionally sp hybridized); (3) the unhybridized p orbitals must overlap to form a continuous ring of parallel orbitals. In most cases, the structure must be planar (or nearly planar) for effective overlap; (4) delocalization of the pi electrons over the ring must results in a lowering of the electronic energy.” Applicants submit that “aryl” group, as defined in the specification, appropriately includes both carboaryl and heteroaryl groups. Contrary to the Examiner’s assertion that “the lowest number of carbon atoms permitted in an aryl is 6,” Applicants further submit that C_{5-20} aryl, as defined in the specification as including 5 to 20 ring atoms, is appropriate and point out thiophene, an aromatic five-membered ring. Applicants respectfully request withdrawal of the rejections.

Third, the Examiner alleges that the “specification does not provide enablement for the treatment of leukemia generally.” Office action at page 3. Applicants do not acquiesce to the Examiner’s reasoning. However, in the interest of advancing prosecution on the merits, Applicants have amended claim 23 to recite “chronic myeloid leukemia,” as exemplified in

Example 9, and reserve the right to pursue the subject matter in future applications. Applicants respectfully request withdrawal of the rejections.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance. Should the examiner feel that further discussion is warranted, the examiner is invited to contact the undersigned at the number below. No fees are believed to be due in connection with this response. In the event that fees are due, please charge Deposit Account No. 50-0842.

Respectfully submitted,

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